

REMARKS

Applicant respectfully requests reconsideration of this application as amended.

Office Action Summary

Claims 1-28 have been rejected under 35 U.S.C. §112, second paragraph.

Claims 1-9 and 17-24 have been rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,243,384 of Eriksson ("Eriksson") in view of applicant's admitted prior art.

Claims 10-16 and 25-28 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Eriksson in view of U.S. Patent No. 6,208,623 of Rochberger ("Rochberger").

Status of Claims

Claims 1-28 are pending in the application. Claims 1, 10, 17 and 25 have been amended to more clearly recite what applicants regard as their invention. The amendment are supported by the specification. No claims have been added or canceled.

Examiner Interview Summary

Applicants thank the Examiner for the courtesy of a telephone interview on June 13, 2007 with applicants' representative Richard W. Thill (Reg. No. 53,686). As a result of the interview, the Examiner agreed to withdraw the rejections of claims 1-28 under 35 USC § 112, second paragraph. Agreement was also reached on an amendment to independent claims 1, 10, 17 and 25 to

more clearly recite what applicants regard as their invention and to overcome the rejections of claims 1-28 under 35 USC § 103(a).

Claim Rejections Under 35 USC § 112

Claims 1-28 were rejected under 35 USC § 112, second paragraph, as indefinite. At issue were the terms “soft permanent virtual circuit” and “destination endpoint.” During the examiner interview cited above, it was pointed out that both “soft permanent virtual circuit” and “destination endpoint” find support in the specification (e.g., at paragraphs 3 and 10, respectively) and that “soft permanent virtual circuit” is a well-known term in the network communication arts that would be understood by one of ordinary skill in the art. Accordingly, the Examiner agreed to withdraw the rejections of claims 1-28 under 35 USC § 112, second paragraph.

Claim Rejections Under 35 USC § 103

Claims 1-9 and 17-24 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Eriksson in view of applicants’ admitted prior art. Claims 1 and 17 have been amended. Applicants submit that the amendments are supported by the specification (see, e.g., para. 37) and that no new matter has been added.

Claims 1-9

As amended, claim 1 recites:

A method for automatically updating a source node in a PNNI ATM network, comprising:
a) receiving, at a destination node in said PNNI ATM network, a notification of an address change of said destination node, wherein said destination node comprises a destination

endpoint for a **soft permanent virtual circuit (SPVC)** that connects said source node with said destination node;

b) **encoding said address change into a SIG field in a PNNI topology state element (PTSE);**

c) issuing said PTSE from said destination node to said source node; and

d) **decoding said address change and automatically updating said source node with said address change.**

(emphasis added).

As discussed in the Examiner interview cited above, Eriksson teaches a method for routing in a PNNI network that uses operator inputs and PNNI topology information derived from a consolidated topology database (Eriksson, Abstract). In particular, Eriksson teaches:

An ATM switching node which implements PNNI protocol has a table (known as the consolidated table) which stores plural records, **each record associating a connection request input field with corresponding routing information.** The node has table maintenance logic which updates the table to consolidate therein both records initiated by operator input and records developed from PNNI updating information. **The PNNI updating information is generated by a PNNI protocol unit which consults a topology database of the node.** Provision of the consolidated table obviates consultation of multiple tables.

The consolidated table has an address analysis section; a routing analysis section; and a local look-up section. The consolidated table has an active version and an inactive version copied therefrom. The active version of the consolidated table is utilized in connection setup. Updating is performed on the inactive version of the consolidated table. When updating is completed, the inactive version of the consolidated table becomes the active version of the consolidated table.

The node also includes a static table in which operator input information is stored for use in developing the records initiated by operator input. The operator input information stored in the static table and the PNNI updating information are merged in the inactive version of the consolidated table during table updating.

(Eriksson, col. 2, line 56 to col. 3, line 21) (emphasis added)

That is, Eriksson teaches a method for setting up and keeping track of routing information at a PNNI network node when the route of a network connection changes (e.g., when the address path changes due to load balancing or node failures). Eriksson is silent with respect to **soft permanent virtual circuits** ("SPVCs") and does not teach or suggest any mechanism for changing, reporting or updating changes in the assigned addresses of any node, let alone the destination endpoint of a SPVC. Applicants respectfully submit that the Office Action confuses changing a list of node addresses in response to route changes, as taught by Eriksson, with making changes to the physical address of a node that is permanently provisioned in an SPVC.

Additionally, Eriksson does not teach or suggest any means for encoding and/or decoding address change information in a SIG field and, as discussed in the above cited Examiner interview, the standard PNNI protocol discussed in the background section of the present application has no provision for encoding such address change information.

Accordingly, applicants submit that claim 1 is patentable over Eriksson and applicants' admitted prior art at least because Erikson and the admitted prior art, either alone or in combination, do not teach or suggest "encoding [an] address change into a SIG field in a PNNI topology state element," and "decoding said address change and automatically updating [a] source node with said address change," as recited in claim 1.

Given that claims 2-9 depend from claim 1, and include all of the limitations of claim 1, applicants submit that claims 2-9 are also patentable over Eriksson.

Claims 17-24

As amended, claim 17 recites:

A machine readable medium having stored thereon sequences of instructions which, when executed by a digital processing system, cause said system to perform a method for automatically updating a source node in a PNNI ATM network, comprising:

in response to a notification of an address change to a destination node in said PNNI ATM network, **encoding said address change into a SIG field in a PNNI topology state element (PTSE);**

issuing said PTSE from said destination node to said source node over a soft permanent virtual circuit (SPVC) connecting said destination node with said source node; and
decoding said address change and updating said source node with said address change.

(emphasis added).

As noted above, Eriksson and the applicants' admitted prior art, either alone or in combination, do not teach or suggest "encoding [an] address change into a SIG field in a PNNI topology state element," or "decoding said address change and updating [a] source node with said address change," as recited in claim 17. According, applicants submit that claim 17 is patentable over the suggested combination.

Given that claims 18-24 depend from claim 17, and include all of the limitations of claim 17, applicants submit that claims 18-24 are also patentable over the suggested combination.

Claims 10-16 and 25-28 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Eriksson in view of Rochberger. Claims 10 and 25 have been amended. Applicants submit that the amendments are supported by the specification (see, e.g., para. 37) and that no new matter has been added.

Claims 10-16

As amended, claim 10 recites:

A method for automatically updating a source node in a PNNI ATM network, comprising:

a) receiving at said source node within said PNNI ATM network, information describing an address change of a destination node within said PNNI ATM network, wherein said destination node comprises a destination endpoint for a soft permanent virtual circuit (SPVC) that connects said source node with said destination node, said address change information comprising an old address for said destination node and a new address for said destination node, wherein **said address change information is encoded within a SIG field in a PNNI topology state element (PTSE);**

b) **decoding said address change information at said source node;**

c) comparing said old address for said destination node with an SPVC destination node address maintained by said source node to establish an SPVC connection supported by said source node; and

d) replacing said SPVC destination node address with said new address if said old address and said SPVC destination node address match.

(emphasis added).

As noted above, Eriksson does not teach or suggest either that “[an] address change information is encoded within a SIG field in a PNNI topology state element,” or “decoding said address change information at [a] source node,” as recited in claim 10. Rochberger teaches a method for inter-network compatability (Rochberger, Abstract) and does not teach or suggest either of the

subject limitations. Accordingly, applicants submit that Eriksson and Rochberger, either alone or in combination, do not teach or suggest the subject limitations and that claim 10 is patentable over the suggested combination.

Given that claims 11-16 depend from claim 10, and include all of the limitations of claim 10, applicants submit that claims 11-16 are also patentable over the suggested combination.

Claims 25-28

As amended, claim 25 recites:

A machine readable medium having stored thereon sequences of instructions which, when executed by a digital processing system, cause said system to perform a method for automatically updating a source node in a PNNI ATM network, comprising:

a) receiving, at said source node within said PNNI ATM network, information describing an address change of a destination node within said PNNI ATM network, wherein said destination node comprises a destination endpoint for a soft permanent virtual circuit (SPVC) that connects said source node to said destination node, said address change information comprising an old address for said destination node and a new address for said destination node, wherein **said address change information is encoded within a SIG field in a PNNI topology state element (PTSE);**

b) **decoding said address change information at said source node;**

c) comparing said old address with an SPVC destination node address maintained by said source node to establish an SPVC connection supported by said source node; and

d) replacing said SPVC destination node address with said new address if said old address and said SPVC destination node address match.

(emphasis added).

As noted above, Eriksson does not teach or suggest either that “[an] address change information is encoded within a SIG field in a PNNI topology state element,” or “decoding said address change information at [a] source node,” as recited in claim 25. Rochberger teaches a method for inter-network compatibility (Rochberger, Abstract) and does not teach or suggest either of the subject limitations. Accordingly, applicants submit that Eriksson and Rochberger, either alone or in combination, do not teach or suggest the subject limitations and that claim 25 is patentable over the suggested combination.

Given that claims 26-28 depend from claim 25, and include all of the limitations of claim 25, applicants submit that claims 26-28 are also patentable over the suggested combination.

Conclusion

In conclusion, applicants respectfully submit that in view of the arguments and amendments set forth herein, the applicable rejections have been overcome. Applicants reserve all rights with respect to the Doctrine of Equivalents.

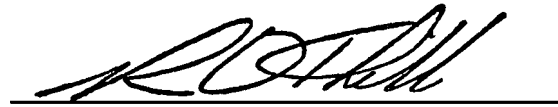
If the Examiner believes a further telephone interview would expedite the prosecution of this application, the Examiner is invited to contact Richard Thill at (408) 720-8300.

If there are any additional charges, please charge our Deposit Account No. 02-2666.

Respectfully submitted,

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP

Dated: June 22, 2007

A handwritten signature in black ink, appearing to read 'R. Thill', is written over a horizontal line.

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